9-31 ELASTOMERIC BEARING PADS

9-31.1 Requirements

Elastomeric bearing pads shall conform to the requirements of AASHTO M 251. The elastomer shall not contain any form of wax.

All bearing pads shall be individually cast with fully molded edges. Corners and edges of molded pads may be rounded at the option of the Contractor. Radius at corners shall not exceed \(^{3}\)8-inch, and radius of edges shall not exceed \(^{1}\)8-inch.

Shims contained in laminated bearing pads shall be mill rolled steel sheets not less than 20 gage in thickness with a minimum cover of elastomer on all edges of:

½-inch for pads less than or equal to 3-inches thick.

¹/₄-inch for pads greater than 3-inches and less than or equal to 7-inches thick, and ¹/₂-inch for pads greater than 7-inches thick.

Steel shims shall conform to ASTM A 1011, Grade 36, unless otherwise noted.

The shims shall be spaced to divide the pad thickness into equal laminations. The bond between the elastomer and metal shims shall be such that, when a sample is tested for separation, failure shall occur within the elastomer and not between the elastomer and the metal shim.

The shear modulus at 73°F or the durometer hardness of the bearing pads shall be as noted in the Contract. If durometer hardness is noted, the following shear modulus shall be applicable for shear modulus testing purposes: 50 durometer - 112 psi, 60 durometer - 165 psi, 70 durometer - 250 psi. Elastomer shall be Grade 3.

Elastomeric bearing pads shall be manufactured with the following tolerances:

Overall vertical dimensions:

Design thickness $1\frac{1}{4}$ -inches or less $-0, +\frac{1}{8}$ -inch Design thickness over $1\frac{1}{4}$ -inches $-0, +\frac{1}{4}$ -inch

Overall horizontal dimensions:

36-inches and less -0, $+\frac{1}{4}$ -inch Over 36-inches -0, $+\frac{1}{2}$ -inch